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(21) International Application Number: PCT/FI91/00046 (22) International Filing Date: 15 February 1991 (15.02.91) (30) Priority data: 482,005 16 February 1990 (16.02.90) US (71) Applicant: ORION-YHTYMÄ OY [FI/FI]; Orionintie 1, SF-02100 Espoo (FI). (72) Inventors: SÖDERLUND, Hans ; Salonkitie 19, SF-01940 Espoo (FI). SYVÄNEN, Ann-Christine ; Mannerheimintie 138 A 11, SF-00270 Helsinki (FI). (74) Agent: ORION CORPORATION; Orion Pharmaceutica, Patent Department, P.O. Box 65, SF-02101 Espoo (FI).		(81) Designated States: AT (European patent), AU, BE (European patent), CA, CH (European patent), DE (European patent), DK (European patent), ES (European patent), FI, FR (European patent), GB (European patent), GR (European patent), IT (European patent), JP, LU (European patent), NL (European patent), NO, SE (European patent). Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i> (88) Date of publication of the International search report: 17 October 1991 (17.10.91)
(54) Title: METHOD AND REAGENT FOR DETERMINING SPECIFIC NUCLEOTIDE VARIATIONS (57) Abstract <p>Detection of variable nucleotide(s) is based on primer extension and incorporation of detectable nucleoside triphosphates. By selecting the detection step primers from the region immediately adjacent to the variable nucleotide, this variation can be detected after incorporation of as few as one nucleoside triphosphate. Labelled nucleoside triphosphates matching the variable nucleotide are added and the incorporation of a label into the detection step primer is measured. The selection of the detection step primer is important to the method according to this invention and is dependent on the nucleotide sequence of interest. The detection step primers are preferably selected so to span the region immediately toward the 3' end from the variable nucleotide to be detected. The method is useful in identifying specific point mutations and genetic variations.</p>		

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INTERNATIONAL SEARCH REPORT

International Application No PCT/FI 91/00046

I. CLASSIFICATION OF SUBJECT MATTER (If several classification symbols apply, indicate all) *		
According to International Patent Classification (IPC) or to both National Classification and IPC		
IPC ⁵ : C 12 Q 1/68, C 12 P 19/34, C 07 H 21/04		
II. FIELDS SEARCHED		
Minimum Documentation Searched *		
Classification System	Classification Symbols	
IPC ⁵	C 12 Q	
Documentation Searched other than Minimum Documentation to the extent that such Documents are included in the Fields Searched *		
III. DOCUMENTS CONSIDERED TO BE RELEVANT*		
Category *	Citation of Document, ** with indication, where appropriate, of the relevant passages **	Relevant to Claim No. **
X, Y	WO, A, 89/10414 (WALLACE & SKOLNICK 2 November 1989 see the whole document, especially page 13, paragraph 2 - page 17; claims 1, 3, 26 ---	1-18, 32
X, Y	WO, A, 90/09455 (GENECO PTY LTD.) 23 August 1990 see the whole document ---	1-18, 32
X	US, A, 4851331 (VARY et al.) 25 July 1989 see abstract; example 3; claims 1-9 ---	1
Y	---	2-18, 32
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X	EP, A, 0123513 (AMERSHAM INTERNATIONAL, plc) 31 October 1984 see abstract; pages 1-13 ---	1
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IV. CERTIFICATION		
Date of the Actual Completion of the International Search	Date of Mailing of this International Search Report	
21st May 1991	22. 08. 91	
International Searching Authority	Signature of Authorised Officer	
EUROPEAN PATENT OFFICE	Natalie Weinberg	

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International Application No PCT/FI 91/00046

III. DOCUMENTS CONSIDERED TO BE RELEVANT (CONTINUED FROM THE SECOND SHEET)		
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ANNEX TO THE INTERNATIONAL SEARCH REPORT ON INTERNATIONAL PATENT APPLICATION NO.

FI 9100046

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This annex lists the patent family members relating to the patent documents cited in the above-mentioned international search report. The members are as contained in the European Patent Office EDP file on 17/07/91. The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

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